



**Summary of April 2010 Aerial Searches for
Raptor Nests, Keystone XL Pipeline Project
Steele City Segment**

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INTRODUCTION

TransCanada Keystone Pipeline LP (Keystone) is currently in the regulatory permitting process for the proposed Keystone XL Pipeline Project (Project). The Steele City Segment of the Project encompasses the proposed pipeline and related facilities such as pump stations, transmission lines, pipe yards and contractor yards in Montana, South Dakota and Nebraska.

An environmental resource issue that affects construction is the location of raptor nests adjacent to the Project. Raptors are migratory birds and are protected under the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712). Bald and golden eagles are also protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c). It is illegal to "take" a raptor, raptor nest, raptor eggs, or raptor chicks. Several raptors, such as ferruginous hawk (*Buteo regalis*), are also considered "sensitive species" by the Bureau of Land Management (BLM) or Birds of Conservation Concern (BCC) by the U.S. Fish and Wildlife Service (USFWS).

Wildlife management agencies often proscribe seasonal no-construction timing constraints within a certain radius of an active raptor nest, or allow the removal of nests (except Bald and Golden eagle nests) outside of the nesting season to avoid impacts during construction. The Keystone XL Oil Pipeline Project Draft Environmental Impact Statement (DEIS) specified a 0.5-mile no construction buffer around active raptor nests between March 1 and August 1, and a no surface occupancy within 0.25-miles of an active raptor nest.

Keystone completed a helicopter aerial survey of the entire Steele City project in April 2009. The 2009 aerial survey covered an area that included the Project centerline and a 0.25-mile buffer either side of the centerline in South Dakota and Nebraska, and a 0.5-mile buffer either side of the centerline in Montana except at major stream and river crossings. A 1.0-mile corridor was surveyed either side of the centerline at major river crossings. Survey protocols and corridor widths were approved by state and federal wildlife management agencies prior to survey efforts. The 2009 surveys documented 226 raptor nests within the survey area including 171 nests in Montana, 25 nests in South Dakota, and 30 nests in Nebraska.

WESTECH Environmental Services, Inc. repeated raptor nest aerial searches for the Project in April 2010, based on the Project's March 2010 centerline. The search corridor was enlarged, and the searches were expanded to include several alternative routes proposed by the Montana Department of Environmental Quality (MT DEQ) as well as transmission lines to proposed pump stations, pipe yards, contractor yards and other Project-related activities.

METHODS

In February 2010 Keystone developed raptor nest survey protocols based on the 2009 protocols. The 2010 protocols included:

1. Depending on weather, fly surveys between April 5 and April 30;
2. Fly surveys in a helicopter. Altitude will vary from <100 to >500 feet above the ground, depending on terrain or other safety concerns, presence of livestock or occupied buildings, etc., but will average about 300 feet above the ground. Where appropriate, flight lines will parallel the pipeline route and be placed 0.25 to 0.50 mile apart, depending on observability. There will be two observers in addition to the pilot; and

3. A 2-mile-wide survey corridor. The corridor will be 1 mile on either side of the proposed and alternative Project centerlines and proposed transmission lines to pump stations, and a 1 mile radius around facilities such as contractor yards.

These protocols were distributed and/or discussed with appropriate USFWS, BLM, Montana Fish, Wildlife, and Parks (MFWP), South Dakota Department of Game, Fish, and Parks (SDGFP), and Nebraska Game and Parks Commission (NEGPC) personnel in March 2010. Survey protocols were approved by each agency.

Aerial searches were flown from April 8 through April 14, 2010 in a Bell Jet Ranger III helicopter, with two experienced observers in addition to the pilot. During survey efforts the helicopter pilot was careful to avoid flying too close to residences or livestock.

Prior to the flights, the helicopter pilot and one observer had entered the search corridors into separate GPS units (one unit for back-up) for navigation purposes. In addition, raptor nests that were located in 2009 were entered into the GPS units to enable a repeat survey of each nest. These locations were transferred to aerial photo base maps of the search corridors. During survey one observer recorded GPS waypoints and photographs of raptor nests or habitat features, while the other observer recorded associated data such as nest activity, species, nest condition, etc.

The survey corridor included:

1. The March 26, 2010 centerline and associated 1-mile radius buffer;
2. 19 route variations that had been proposed by the Montana Department of Environmental Quality (MDEQ);
3. The proposed electrical transmission lines that service each pump station and associated 1-mile radius buffer; and
4. All associated facilities such as pipe yards, contractor yards, construction camps, etc.

All nests that were located during previous surveys were reviewed to determine status and species. New nests were also recorded. Nests that were recorded in previous surveys but that were determined to be used by non-raptor species (e.g. magpies) were not recorded. The following information was collected at each nest:

- GPS waypoint;
- Species utilizing the nest or likely to utilize the nest. If stick nests were unoccupied they were assigned a status of "Buteo" indicating that they would likely be occupied by red-tailed hawk (*Buteo jamaicensis*), Swainson's hawk (*Buteo swainsoni*), or possibly ferruginous hawk. However, it is possible that great horned owls (*Bubo virginianus*) or long-eared owls (*Asio otus*) may occupy these nests;
- Photo (most nests);
- The nest substrate or base (e.g. cottonwood tree, deciduous tree, cliff, rock, etc.);
- Number of adults, eggs, or chicks observed on or near the nest;
- Nest status: *Active* (birds observed on or near the nest, or eggs or chicks seen in the nest), *Inactive* (nest deteriorated to an extent that it is unlikely to be used in 2010), and *Unconfirmed* (nest in good condition and could be used in 2010 by birds that were not visible during the survey or had not yet nested).
- Visibility of nest from the March 26, 2010 centerline or the MDEQ route variation (based on field observations and a review of topographic maps); and
- General comments.

RESULTS

Following field surveys GPS data were plotted relative to the March, 26 2010 centerline, MDEQ proposed route variations, transmission lines, and associated facilities (e.g. pipe yards, contractor yards, etc.) The distance from each feature to active nests was determined within the relevant survey corridor. A summary of the data relevant to the proposed centerline are presented in Attachment 1; a summary of the data relevant to the project transmission lines and facilities that are off the right-of-way (pipe yards, contractor yards, etc.) are presented in Attachment 2. The attached maps depict each nest that was located within the entire 1-mile radius buffer (2 miles total) of the Project and along all 19 MDEQ route variations. Shapefiles that are submitted separately also depict each nest that was located within the 1-mile radius buffer of the Project and along all MDEQ route variations. Since the DEIS has specified a 0.5-mile radius seasonal no-construction buffer, only nests within a 0.5-mile radius of the Project are summarized below. Also, only the 9 preferred MDEQ route variations are compared in Table 2.

Montana

Raptor nest searches located 52 raptor nests within a 0.5-mile radius of the Project centerline in Montana, six raptor nests within 0.5-mile radius of project transmission lines, and zero raptor nests within 0.5-miles of associated facilities. Table 1 summarizes Montana raptor nest data.

Table 1. Raptor Nest Status – Montana, April 2010	
Type of Nest and Project Component	Number
Active Nests <0.5 Mile from 3.26.2010 CL	21
Inactive Nests <0.5 Mile from 3.26.2010 CL	7
Unconfirmed Nests <0.5 Mile from 3.26.2010 CL	24
Subtotal Centerline	52
Active Nests <0.5 Mile from Transmission Lines	4
Inactive Nests <0.5 Mile from Transmission Lines	1
Unconfirmed Nests <0.5 Mile from Transmission Lines	1
Subtotal Transmission Lines	6
Active Nests <0.5 Mile from Associated Facility	0
Inactive Nests <0.5 Mile from Associated Facility	0
Unconfirmed Nests <0.5 Mile from Associated Facility	0
Subtotal Associated Facility	0
TOTAL	58

Raptor nest searches in Montana in 2009 identified 171 nests within the narrower corridor, including active, inactive, and unconfirmed nests. Many of the unconfirmed or unknown nests identified in 2009 were determined to be magpie nests during the 2010 survey. Small raptors, such as merlins (*Falco columbarius*), may occasionally use magpie nests; however, the likelihood of merlins or other small raptors using magpie nests is very low compared to the likelihood of magpies or other non-raptors using these nests. Consequently, magpie nests were not recorded in 2010.

In total, 123 raptor nests were identified within 1 mile of the centerline, 20 raptor nests were identified within 1 mile of transmission lines, and 5 raptor nests were identified within 1 mile of associated facilities. A total of 148 raptor nests were located within 1 mile of all proposed Project components in Montana.

In addition to searching for raptor nests adjacent to proposed Project components, searches were also completed in a 1-mile radius of each recommended MDEQ route variation. The DEIS identified 9 preferred MDEQ route variations. Table 2 presents raptor nests that were located within a 0.5-mile radius of the preferred MDEQ route variations and the number of raptor nests within a 0.5-mile radius of the corresponding proposed Project centerline.

MDEQ Route Variation	# Active Nests <0.5 Mile from MTV-#	# Active Nests <0.5 Mile from Corresponding CL	# Inactive Nests <0.5 Mile from MTV-#	# Inactive Nests <0.5 Mile from Corresponding CL	# Unconfirmed Nests <0.5 Mile from MTV-#	# Unconfirmed Nests <0.5 Mile Corresponding CL
MTV-1	0	1	0	0	0	5
MTV-2	2	1	0	0	1	0
MTV-5	1	0	0	0	0	0
MTV-6	3	2	0	1	0	0
MTV-9	0	1	0	1	1	2
MTV-11	0	0	0	0	0	0
MTV-15	0	0	0	0	0	0
MTV-17	1	0	0	0	0	0
MTV-19	0	0	0	0	0	0
TOTAL	7	5	0	2	2	7

South Dakota

Raptor nest searches located 43 raptor nests within a 0.5-mile radius of the Project centerline in South Dakota, 14 raptor nests within 0.5-mile radius of project transmission lines, and 2 raptor nests within 0.5-miles of associated facilities. Table 2 summarizes South Dakota raptor nest data.

Table 3. Raptor Nest Status – South Dakota, April 2010	
Type of Nest and Project Component	Number
Active Nests <0.5 Mile from 3.26.2010 CL	20
Inactive Nests <0.5 Mile from 3.26.2010 CL	11
Unconfirmed Nests <0.5 Mile from 3.26.2010 CL	12
Subtotal Centerline	43
Active Nests <0.5 Mile from Transmission Lines	7
Inactive Nests <0.5 Mile from Transmission Lines	1
Unconfirmed Nests <0.5 Mile from Transmission Lines	6
Subtotal Transmission Lines	14
Active Nests <0.5 Mile from Associated Facility	1
Inactive Nests <0.5 Mile from Associated Facility	0
Unconfirmed Nests <0.5 Mile from Associated Facility	1
Subtotal Associated Facility	2
TOTAL	59

The 2009 raptor nest searches located 25 nests within the narrower survey corridor. The 2010 raptor nest searches located a total of 78 raptor nests within 1 mile of the centerline, 37 raptor nests within 1 mile of transmission lines, and 3 raptor nests within 1 mile of associated facilities. A total of 118 raptor nests were located within 1 mile of all proposed Project components in South Dakota.

Nebraska

Raptor nest searches located 36 raptor nests within a 0.5-mile radius of the Project centerline in Nebraska, 5 raptor nests within 0.5-mile radius of project transmission lines, and zero raptor nests within 0.5-miles of associated facilities. Table 3 summarizes Nebraska raptor nest data.

Type of Nest and Project Component	Number
Active Nests <0.5 Mile from 3.26.2010 CL	17
Inactive Nests <0.5 Mile from 3.26.2010 CL	4
Unconfirmed Nests <0.5 Mile from 3.26.2010 CL	15
Subtotal Centerline	36
Active Nests <0.5 Mile from Transmission Lines	3
Inactive Nests <0.5 Mile from Transmission Lines	0
Unconfirmed Nests <0.5 Mile from Transmission Lines	2
Subtotal Transmission Lines	5
Active Nests <0.5 Mile from Associated Facility	0
Inactive Nests <0.5 Mile from Associated Facility	0
Unconfirmed Nests <0.5 Mile from Associated Facility	0
Subtotal Associated Facility	0
TOTAL	41

The 2009 raptor nest searches located 30 nests within the narrower survey corridor. The 2010 raptor nest searches located a total of 58 raptor nests within 1 mile of the centerline, 9 raptor nests within 1 mile of transmission lines, and 3 raptor nests within 1 mile of associated facilities. A total of 70 raptor nests were located within 1 mile of all proposed Project components in Nebraska.

LITERATURE CITED

AECOM. 2009. A summary report of the April 2009 aerial greater sage-grouse/sharp-tailed grouse lek and raptor nest surveys completed for the Steele City Segment of the Keystone XL Project right-of-way. Tech. report for TransCanada Keystone Pipeline, LP.

Attachment 1. Raptor Nest Aerial Search Results, Keystone XL - Steele City April 2010: Centerline and MDEQ Route Variations

Date	Way-point No.	Species	Species Code	Photo No.	Sub-strate	No. Adults Obs.	No. Eggs Obs.	No. Chicks Obs.	Nest Status	Distance and Nest Visibility*			Comments	
										Distance from 3.26.10 CL (mi)	Visible from 3.26.10 CL	Distance from PPA CL (mi)		Visible from PPA CL
4/8/2010	017	Ferruginous hawk	FH	745	deciduous	1			Unconfirmed	0.13	Y	0.13	Y	moderate to good condition
4/8/2010	018	Red-tailed hawk	RTH	746	cottonwood				Active	0.58	Y	3.13	N	1 on nest
4/8/2010	019	Red-tailed hawk	RTH	747	deciduous				Unconfirmed	0.12	Y	2.56	N	moderate condition
4/8/2010	020	Buteo	BU	748	cottonwood				Unconfirmed	0.18	Y	2.28	N	moderate condition
4/8/2010	021	Buteo	BU	748	cottonwood				Unconfirmed	0.15	Y	2.36	N	moderate condition
4/8/2010	022	Buteo	BU	751	deciduous				Unconfirmed	0.85	N	2.25	N	moderate condition
4/8/2010	023	Great horned owl	GHO	752-3	deciduous	1			Active	0.14	Y	3.05	N	moderate condition
4/8/2010	024	Red-tailed hawk	RTH	754	cottonwood	1			Active	0.69	N	2.60	N	1 near nest
4/8/2010	025	Red-tailed hawk	RTH	755	deciduous	1			Active	2.68	N	2.68	N	1 on nest
4/8/2010	026	Great horned owl	GHO	760	deciduous				Unconfirmed	0.60	Y	1.94	N	
4/8/2010	027	Red-tailed hawk	RTH	761	cottonwood				Unconfirmed	2.09	Y	2.09	N	
4/8/2010	028	Buteo	BU	761	cottonwood				Unconfirmed	1.99	N	1.99	N	
4/8/2010	029	Buteo	BU	762	cottonwood				Unconfirmed	1.04	N	1.64	N	
4/8/2010	030	Buteo	BU	763	rock / cliff				Unconfirmed	0.32	Y	0.32	N	
4/8/2010	031	Ferruginous hawk	FH	763	cottonwood	1			Active	0.29	Y	0.30	Y	1 nearby
4/8/2010	032	Buteo	BU	764	cottonwood				Unconfirmed	0.81	Y	0.81	Y	
4/8/2010	033	Buteo	BU	765	cottonwood				Active	0.09	Y	0.09	Y	adult within 1/4-mile
4/8/2010	034	Red-tailed hawk	RTH	780	cottonwood	1			Active	1.04	Y	1.04	Y	1 on nest
4/8/2010	047	Red-tailed hawk	RTH	779	cottonwood				Active	0.78	N	0.78	N	nest deteriorated
4/8/2010	035	Golden eagle	GE	766	cottonwood	1			Inactive	0.70	N	0.70	N	nest deteriorated
4/8/2010	039	Buteo	BU	771	cottonwood				Active	0.57	Y	0.57	Y	1 on nest
4/8/2010	040	Buteo	BU	772	cottonwood				Inactive	0.85	Y	0.85	Y	nest deteriorated
4/8/2010	038	Great horned owl	GHO	770	deciduous	1			Active	0.89	Y	0.89	Y	
4/8/2010	037	Buteo	BU	769	cottonwood		4		Active	0.27	Y	0.27	Y	
4/8/2010	053	Red-tailed hawk	RTH	785	cottonwood				Unconfirmed	0.74	Y	0.74	Y	1 on nest, active
4/9/2010	062	Buteo	BU	819	cottonwood	1			Active	0.47	Y	0.47	Y	nest deteriorated
4/9/2010	063	Bald eagle	BE	821	deciduous				Inactive	0.75	N	0.75	N	
4/9/2010	054	Osprey	OS	786	power pole	2			Active	0.35	Y	0.35	Y	1 on nest
4/9/2010	064	Red-tailed hawk	RTH	-	deciduous	1			Active	0.72	Y	0.72	Y	nest deteriorated
4/9/2010	065	Red-tailed hawk	RTH	823	deciduous				Inactive	0.84	Y	0.84	Y	stick nest, possible cavity nest
4/9/2010	066	Buteo	BU	824	cottonwood				Unconfirmed	0.23	Y	0.23	Y	
4/9/2010	067	Ferruginous hawk	FH	826-7	rock / cliff				Unconfirmed	0.22	Y	0.22	Y	
4/9/2010	068	Red-tailed hawk	RTH	828	cottonwood				Unconfirmed	0.28	Y	0.28	Y	on nest
4/9/2010	069	Ferruginous hawk	FH	829	cottonwood	1			Active	0.17	Y	0.17	Y	large sticks
4/9/2010	070	Great horned owl	GHO	830	deciduous				Inactive	0.77	Y	0.77	Y	nest deteriorated
4/9/2010	072	Golden eagle	GE	832	rock				Inactive	0.18	Y	0.18	Y	1 on nest
4/9/2010	074	Golden eagle	GE	834	clay butte	1			Active	0.32	Y	0.32	Y	
4/9/2010	075	Red-tailed hawk	RTH	835	cottonwood	1		1	Active	0.45	N	0.45	N	1 in area
4/9/2010	076	Great horned owl	GHO	836	cottonwood				Active	0.72	Y	0.72	Y	
4/9/2010	077	Red-tailed hawk	RTH	839	cottonwood	1			Active	0.10	Y	0.10	Y	1 on nest
4/9/2010	080	Buteo	BU	840	cottonwood	1			Unconfirmed	0.07	Y	0.07	Y	
4/9/2010	082	Great horned owl	GHO	842	cottonwood				Active	1.26	Y	1.26	Y	
4/9/2010	083	Buteo	BU	843	deciduous				Inactive	0.60	Y	0.60	Y	1 on nest
4/9/2010	084	Buteo	BU	844	cottonwood	1		1	Active	0.22	Y	0.22	Y	
4/9/2010	085	Great horned owl	GHO	844	cottonwood				Active	0.19	Y	0.19	Y	
4/9/2010	088	Great horned owl	GHO	845	cottonwood				Unconfirmed	1.08	N	1.08	N	
4/9/2010	089	Buteo	BU	849	cottonwood				Unconfirmed	0.86	N	0.86	N	nest partly deteriorated
4/9/2010	090	Buteo	BU	850	deciduous				Unconfirmed	1.16	N	1.16	N	2 nests adjacent here
4/9/2010	091	Buteo	BU	851	cottonwood				Unconfirmed	0.81	N	0.81	N	both adults in nest tree
4/9/2010	093	Buteo	BU	852	deciduous	1			Inactive	0.49	Y	0.49	Y	
4/9/2010	092	Red-tailed hawk	RTH	854-5	deciduous				Unconfirmed	0.15	Y	0.15	Y	
4/9/2010	092	Red-tailed hawk	RTH	853	cottonwood				Active					

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Date	Way-point No.	Species	Species Code	Photo No.	Sub-strate	No. Adults Obs.	No. Eggs Obs.	No. Chicks Obs.	Nest Status	Distance and Nest Visibility			Comments	
										Distance from 3.26:10 C/L (mi)	Visible from 3.26:10 C/L	Distance from PPA C/L (mi)		Visible from PPA C/L
4/9/2010	094	Great Horned Owl	GHO	856	deciduous	1			Active	0.70	Y	2.23	N	
4/9/2010	095	Buteo	BU	857	cottonwood				Inactive	0.21	Y	0.90	Y	nest partly deteriorated
4/9/2010	098	Buteo	BU	860	cottonwood				Unconfirmed	0.28	Y	0.20	Y	small nest
4/9/2010	100	Red-tailed hawk	RTH	862	cottonwood	1	2		Active	0.08	Y	0.08	Y	
4/9/2010	103	Ferruginous hawk	FH	865	deciduous	1			Active	0.44	Y	0.44	Y	
4/9/2010	104	Buteo	BU	867	cottonwood	1			Unconfirmed	0.59	N	0.59	N	1 on nest
4/9/2010	105	Golden eagle	GE	868	cottonwood	1			Active	0.61	Y	0.61	Y	1 on nest
4/9/2010	106	Great horned owl	GHO	869	cottonwood	1			Active	0.46	Y	0.46	Y	
4/9/2010	107	Buteo	BU	870	deciduous				Unconfirmed	0.59	N	0.59	N	
4/9/2010	108	Buteo	BU	871	cottonwood				Unconfirmed	0.10	Y	0.10	Y	
4/9/2010	109	Buteo	BU	872	deciduous				Inactive	0.76	N	0.76	N	nest deteriorated
4/9/2010	110	Buteo	BU	873	deciduous				Inactive	0.24	Y	0.24	Y	
4/9/2010	111	Buteo	BU	874	deciduous				Unconfirmed	0.47	Y	0.47	Y	
4/9/2010	112	Ferruginous hawk	FH	875	deciduous				Unconfirmed	1.05	Y	1.05	Y	Nest in good condition
4/9/2010	113	Ferruginous hawk	FH	876	deciduous				Unconfirmed	0.58	Y	0.58	Y	nest badly deteriorated
4/9/2010	115	Great horned owl	GHO	878	deciduous	1			Inactive	0.53	Y	0.53	Y	1 on nest
4/9/2010	114	Buteo	BU	877	deciduous				Active	0.26	Y	0.26	Y	
4/10/2010	146	Golden eagle	GE	917	dead ponderosa				Unconfirmed	0.35	Y	0.35	Y	
4/10/2010	144	Buteo	BU	915	deciduous				Unconfirmed	0.92	Y	0.92	Y	
4/10/2010	145	Great horned owl	GHO	916	deciduous	1			Active	0.95	Y	0.95	Y	1 on nest
4/10/2010	143	Red-tailed hawk	RTH	914	deciduous	1			Active	0.72	Y	0.72	Y	1 on nest
4/10/2010	142	Red-tailed hawk	RTH	913	deciduous	2			Active	0.18	Y	0.18	Y	2 nearby
4/10/2010	141	Ferruginous hawk	FH	912	deciduous	1			Active	0.07	Y	0.07	Y	1 on nest
4/10/2010	136	Buteo	BU	907	cottonwood				Unconfirmed	0.25	Y	0.25	Y	
4/10/2010	137	Ferruginous hawk	FH	908	rock				Inactive	0.83	Y	0.83	Y	2 badly deteriorated nests
4/10/2010	138	Ferruginous hawk	FH	909	rock				Unconfirmed	0.70	Y	0.70	Y	nest in good condition
4/10/2010	140	Ferruginous hawk	FH	911	rock				Unconfirmed	0.71	Y	0.71	Y	nest in good condition
4/10/2010	139	Ferruginous hawk	FH	910	rock				Inactive	0.72	Y	0.72	Y	nest badly deteriorated
4/10/2010	135	Red-tailed hawk	RTH	906	cottonwood	1			Active	0.59	Y	0.59	Y	1 on nest
4/10/2010	134	Great horned owl	GHO	905	cottonwood	1			Active	0.08	Y	0.08	Y	1 on nest
4/10/2010	133	Red-tailed hawk	RTH	904	deciduous	1			Active	0.93	Y	0.93	Y	1 on nest
4/10/2010	132	Great horned owl	GHO	903	cottonwood	2			Active	0.06	Y	0.06	Y	1 on nest, 1 nearby
4/10/2010	131	Red-tailed hawk	RTH	902	cottonwood	1			Active	0.43	Y	0.43	Y	1 RTH nearby
4/10/2010	130	Great horned owl	GHO	901	deciduous	1			Active	0.10	Y	0.10	Y	1 on nest
4/10/2010	127	Golden eagle	GE	898	clay bank	1			Inactive	0.32	N	0.32	N	nest badly deteriorated
4/10/2010	129	Ferruginous hawk	FH	899	clay bank				Active	0.57	N	0.57	N	1 adult perched (within 50')
4/10/2010	128	Golden eagle	GE	897	clay bank				Active	0.05	Y	0.05	Y	3 broken eggs (last year?)
4/10/2010	126	Ferruginous hawk	FH	896	clay bank				Unconfirmed	0.41	N	0.41	N	nest badly deteriorated
4/10/2010	125	Ferruginous hawk	FH	895	clay bank				Inactive	0.84	N	0.84	N	
4/10/2010	124	Ferruginous hawk	FH	894	clay bank				Active	0.55	N	0.55	N	1 on nest, both adults in area
4/10/2010	157	Golden eagle	GE	928	rock / cliff	2			Unconfirmed	0.25	Y	0.25	Y	feathers near nest
4/10/2010	159	Ferruginous hawk	FH	930	rock				Inactive	0.56	Y	0.56	Y	nest badly deteriorated
4/10/2010	160	Ferruginous hawk	FH	931	clay bank				Unconfirmed	0.34	Y	0.34	Y	
4/10/2010	161	Golden eagle	GE	932	clay bank				Unconfirmed	0.14	Y	0.14	Y	
4/10/2010	162	Golden eagle	GE	933	clay butte				Unconfirmed	0.77	Y	0.77	Y	
4/10/2010	163	Ferruginous hawk	FH	934	clay bank				Unconfirmed	0.58	N	0.58	N	
4/10/2010	164	Ferruginous hawk	FH	935	clay bank				Unconfirmed	0.45	Y	0.45	Y	
4/10/2010	166	Buteo	BU	936	cottonwood				Unconfirmed	0.65	Y	0.65	Y	over county road
4/10/2010	167	Ferruginous hawk	FH	937	clay bank				Inactive	0.45	Y	0.45	Y	nest deteriorated
4/10/2010		Ferruginous hawk	FH		clay bank				Inactive	0.45	Y	0.45	Y	nest in good condition

Attachment 1. Raptor Nest Aerial Search Results, Keystone XL - Steele City April 2010: Centerline and MDEQ Route Variations

Date	Waypoint No.	Species	Species Code	Photo No.	Sub-strate	No. Adults Obs.	No. Eggs Obs.	No. Chicks Obs.	Nest Status	Distance and Nest Visibility				Comments
										Distance from 3.26, 10 C/L (mi)	Visible from 3.26, 10 C/L	Distance from PPA C/L (mi)	Visible from PPA C/L	
4/10/2010	165	Ferruginous hawk	FH	-	clay bank	1	1		Active	0.22	Y	0.22	Y	1 on nest
4/10/2010	168	Ferruginous hawk	FH	938	cottonwood				Active	0.56	Y	0.56	Y	nest somewhat deteriorated
4/10/2010	170	Ferruginous hawk	FH	941	clay bank				Inactive	0.23	Y	0.23	Y	nest somewhat deteriorated
4/10/2010	171	Ferruginous hawk	FH	942	clay bank				Inactive	0.33	Y	0.33	Y	nest in moderate condition
4/10/2010	172	Buteo	BU	943	cottonwood				Unconfirmed	0.24	Y	0.24	Y	nest in poor condition
4/10/2010	173	Buteo	BU	945	cottonwood				Inactive	0.06	Y	0.06	Y	
4/10/2010	174	Golden eagle	GE	946	cottonwood				Unconfirmed	0.78	N	0.78	N	inactive nest
4/11/2010	195	Buteo	BU	981	deciduous	1			Inactive	0.17	Y	-	-	1 on nest
4/11/2010	194	Buteo	BU	980	deciduous				Active	0.32	Y	-	-	shelterbelt, nest in good condition
4/11/2010	197	Red-tailed hawk	RTH	983	deciduous				Unconfirmed	0.50	Y	-	-	1 on nest, flushed
4/11/2010	200	Red-tailed hawk	RTH	986	deciduous	1			Active	0.25	Y	-	-	1 on nest
4/11/2010	198	Ferruginous hawk	FH	984	deciduous	1			Active	0.63	Y	-	-	1 on nest
4/11/2010	201	Great horned owl	GHO	987	cottonwood	1			Active	0.57	Y	-	-	1 on nest
4/11/2010	199	Golden eagle	GE	985	cottonwood	1			Active	0.16	Y	-	-	1 on nest
4/11/2010	205	Great horned owl	GHO	991	cottonwood	1			Active	0.38	Y	-	-	1 on nest
4/11/2010	206	Buteo	BU	992	deciduous				Inactive	0.45	Y	-	-	older nest in poor condition
4/11/2010	208	Great horned owl	GHO	995	cottonwood	1			Active	0.86	N	-	-	1 on nest; did not flush
4/11/2010	209	Red-tailed hawk	RTH	996	deciduous	1			Active	0.25	Y	-	-	older nest
4/11/2010	210	Red-tailed hawk	RTH	997	deciduous				Inactive	0.22	Y	-	-	2 hawks nearby
4/11/2010	211	Red-tailed hawk	RTH	998	deciduous	1			Active	0.19	Y	-	-	older nest
4/11/2010	213	Buteo	BU	1001	deciduous				Inactive	0.07	N	-	-	older nest
4/11/2010	214	Buteo	BU	1002	deciduous				Inactive	0.34	N	-	-	1 on nest
4/11/2010	215	Great horned owl	GHO	1003	deciduous	1			Active	0.41	N	-	-	1 on nest, flushed
4/11/2010	216	Red-tailed hawk	RTH	1004	deciduous	1	2		Active	0.63	Y	-	-	older nest
4/11/2010	217	Red-tailed hawk	RTH	1005	deciduous				Inactive	0.19	Y	-	-	nest in good condition
4/11/2010	219	Red-tailed hawk	RTH	1008	deciduous				Unconfirmed	0.22	Y	-	-	nest in good condition
4/11/2010	221	Red-tailed hawk	RTH	1010	deciduous				Unconfirmed	0.32	Y	-	-	nest in good condition
4/11/2010	222	Red-tailed hawk	RTH	1014	cottonwood				Unconfirmed	0.47	Y	-	-	1 adult on nest
4/11/2010	223	Red-tailed hawk	RTH	1015	cottonwood	1	2		Active	0.24	Y	-	-	2 adults flushed
4/11/2010	225	Red-tailed hawk	RTH	1019	cottonwood	2			Unconfirmed	0.62	Y	-	-	nest in good condition
4/11/2010	228	Red-tailed hawk	RTH	1022	deciduous	1			Active	0.66	Y	-	-	active with 1 adult
4/11/2010	227	Red-tailed hawk	RTH	1021	deciduous	2			Active	0.74	Y	-	-	nest in moderate condition
4/11/2010	226	Golden eagle	GE	1020	deciduous				Unconfirmed	0.37	Y	-	-	older nest in poor condition
4/12/2010	234	Red-tailed hawk	RTH	1035	deciduous				Inactive	0.77	N	-	-	nest in moderate condition
4/12/2010	233	Buteo	BU	1034	deciduous				Unconfirmed	0.60	Y	-	-	nest in moderate condition
4/12/2010	235	Buteo	BU	1036	cottonwood				Unconfirmed	0.78	Y	-	-	1 adult flushed
4/12/2010	236	Buteo	BU	1037	deciduous	1			Active	0.17	Y	-	-	1 RTH nearby
4/12/2010	237	Red-tailed hawk	RTH	1039	cottonwood	1			Active	0.59	N	-	-	nest in moderate condition
4/12/2010	238	Red-tailed hawk	RTH	1040	deciduous	1			Active	0.75	N	-	-	1 adult on nest
4/12/2010	239	Buteo	BU	1041	cottonwood		2		Unconfirmed	0.58	Y	-	-	nest in good condition
4/12/2010	240	Red-tailed hawk	RTH	1042	cottonwood	1			Active	0.38	Y	-	-	1 adult on nest
4/12/2010	241	Red-tailed hawk	RTH	1043	cottonwood				Active	0.88	Y	-	-	1 on nest, 1 nearby
4/12/2010	242	Swainson's hawk	SWH	1042	deciduous	1	2		Active	0.41	Y	-	-	1 near nest, 1 nearby
4/12/2010	245	Red-tailed hawk	RTH	1051	deciduous	2			Active	0.99	N	-	-	1 on nest
4/12/2010	246	Great horned owl	GHO	1052	deciduous	2			Active	0.40	Y	-	-	1 near nest, 1 nearby
4/12/2010	244	Red-tailed hawk	RTH	1050	deciduous	2			Active	0.65	Y	-	-	1 on nest
4/12/2010	243	Great horned owl	GHO	1049	deciduous	1			Active	0.94	Y	-	-	nest in good condition
4/12/2010	247	Golden eagle	GE	1054	deciduous	1			Active	0.11	Y	-	-	
4/12/2010	248	Great horned owl	GHO	1056	deciduous				Unconfirmed					

Attachment 1. Raptor Nest Aerial Search Results, Keystone XL - Steele City April 2010: Centerline and MDEQ Route Variations

Date	Way-point No.	Species	Species Code	Photo No.	Sub-strate	No. Adults Obs.	No. Eggs Obs.	No. Chicks Obs.	Nest Status	Distance and Nest Visibility*				Comments
										Distance from 3.26-10 C/L (mi)	Visible from 3.26-10 C/L	Distance from PPA C/L (mi)	Visible from PPA C/L	
4/12/2010	249	Red-tailed hawk	RTH	1057	deciduous	2			Active	0.11	Y			2 adults in area
4/12/2010	250	Golden eagle	GE	1058	cottonwood				Unconfirmed	0.12	Y			large nest, moderate condition
4/12/2010	251	Red-tailed hawk	RTH	1064	deciduous	2	3		Active	1.15	Y			2 adults
4/12/2010	252	Red-tailed hawk	RTH	1065	deciduous				Inactive	0.12	Y			older nest in poor condition; inactive
4/12/2010	253	Great horned owl	GHO	1066	deciduous	1			Active	0.03	Y			1 on nest
4/12/2010	254	Great horned owl	GHO	1067	deciduous	1	1	2	Active	0.21	Y			1 on nest with chicks; 1 nearby
4/12/2010	255	Red-tailed hawk	RTH	1068	deciduous	1			Active	0.45	Y			1 on nest
4/12/2010	256	Red-tailed hawk	RTH	1069	deciduous	1			Active	0.49	Y			1 adult nearby
4/12/2010	257	Golden eagle	GE	1070	cottonwood				Inactive	0.63	Y			nest in poor condition
4/12/2010	258	Red-tailed hawk	RTH	1073	cottonwood				Inactive	0.67	N			nest in poor condition
4/12/2010	259	Red-tailed hawk	RTH	1074	deciduous				Unconfirmed	0.20	Y			nest in good condition
4/12/2010	262	Red-tailed hawk	RTH	1077	cottonwood				Unconfirmed	0.67	Y			nest in moderate condition
4/12/2010	261	Red-tailed hawk	RTH	1076	cottonwood	1			Active	0.85	Y			1 on nest
4/12/2010	271	Red-tailed hawk	RTH	1088	cottonwood	1	1		Active	0.09	Y			1 on nest
4/12/2010	272	Accipiter	ACC	1089	deciduous				Inactive	0.44	N			nest in moderate condition
4/12/2010	273	Great blue heron	GBH	1090	cottonwood	20			Active	0.48	Y			GBH rookery - about 20 nests
4/12/2010	274	Red-tailed hawk	RTH	1091	cottonwood				Active	0.37	Y			nest in moderate condition
4/12/2010	275	Red-tailed hawk	RTH	1092	cottonwood				Unconfirmed	0.28	Y			nest in moderate condition
4/12/2010	276	Great horned owl	GHO	1093	cottonwood	1	2		Active	0.22	Y			adult on nest
4/12/2010	277	Red-tailed hawk	RTH	1094	cottonwood	1			Active	0.71	Y			1 on nest
4/12/2010	278	Red-tailed hawk	RTH	1095	deciduous				Inactive	0.69	Y			deteriorated nest
4/12/2010	279	Red-tailed hawk	RTH		cottonwood				Unconfirmed	0.58	Y			
4/12/2010	284	Red-tailed hawk	RTH	1100	deciduous	1			Active	0.32	Y			1 on nest
4/12/2010	287	Red-tailed hawk	RTH	1106	cottonwood				Unconfirmed	0.23	Y			nest in good condition
4/12/2010	286	Red-tailed hawk	RTH	1105	cottonwood	1			Active	0.30	Y			1 on nest
4/12/2010	288	Accipiter	ACC	1107	deciduous				Unconfirmed	0.31	Y			on HDD
4/13/2010	289	Red-tailed hawk	RTH	1115	cottonwood				Unconfirmed	0.12	Y			nest in moderate condition
4/13/2010	290	Red-tailed hawk	RTH	1116	cottonwood				Unconfirmed	0.35	Y			nest in good condition
4/13/2010	291	Great horned owl	GHO	1124	deciduous	1			Active	0.31	Y			1 on nest, 2 nearby
4/13/2010	292	Red-tailed hawk	RTH		deciduous				Unconfirmed	0.76	Y			1 on nest, 1 nearby
4/13/2010	293	Great horned owl	GHO	1129	cottonwood	1			Active	0.94	Y			near house; high altitude observation
4/13/2010	295	Red-tailed hawk	RTH	1137	cottonwood				Unconfirmed	0.63	Y			no birds observed
4/13/2010	296	Red-tailed hawk	RTH		deciduous				Unconfirmed	0.24	Y			near cattle; high altitude observation
4/13/2010	298	Great horned owl	GHO	1139	cottonwood	1			Active	0.72	Y			1 on nest
4/13/2010	299	Red-tailed hawk	RTH	1143	deciduous				Unconfirmed	0.08	Y			nest in good condition
4/13/2010	303	Red-tailed hawk	RTH	1150	cottonwood	1			Active	0.14	Y			1 on nest
4/13/2010	304	Red-tailed hawk	RTH	1151	cottonwood	1			Active	0.49	Y			1 on nest, 1 nearby
4/13/2010	305	Red-tailed hawk	RTH	1154	deciduous				Inactive	0.38	Y			nest in poor/moderate condition
4/13/2010	306	Red-tailed hawk	RTH	1156	deciduous				Unconfirmed	0.07	Y			nest moderate condition
4/13/2010	307	Red-tailed hawk	RTH	1162	deciduous	1	1		Active	0.57	N			1 on nest
4/13/2010	308	Red-tailed hawk	RTH	1163-4	deciduous	2	2		Active	0.18	Y			1 on nest
4/13/2010	309	Red-tailed hawk	RTH	1165	deciduous	2	1		Active	0.64	N			1 on nest
4/13/2010	310	Red-tailed hawk	RTH	1167	deciduous				Unconfirmed	0.31	Y			nest in moderate condition
4/13/2010	312	Great horned owl	GHO	1169	deciduous	1	1		Active	0.10	Y			1 on nest
4/13/2010	311	Accipiter	ACC	1168	deciduous				Inactive	0.01	Y			inactive; possible squirrel nest
4/13/2010	314	Bald eagle	BE	1171-2	cottonwood	2			Active	0.56	Y			1 on nest
4/13/2010	313	Red-tailed hawk	RTH	1170	cottonwood	1			Active	0.37	Y			1 on nest
4/13/2010	315	Bald eagle	BE	1174	cottonwood				Inactive	0.74	Y			inactive alternate nest
4/13/2010	317	Red-tailed hawk	RTH	1176	cottonwood				Unconfirmed	0.49	Y			nest in good condition

Attachment 1. Raptor Nest Aerial Search Results, Keystone XL - Steele City April 2010: Centerline and MDEQ Route Variations

Date	Way-point No.	Species	Species Code	Photo No.	Sub-strate	No. Adults Obs.	No. Eggs Obs.	No. Chicks Obs.	Nest Status	Distance and Nest Visibility*				Comments
										Distance from 3.26.10 C/L (mi)	Visible from 3.26.10 C/L	Distance from PPA C/L (mi)	Visible from PPA	
4/13/2010	318	Red-tailed hawk	RTH	1177	cottonwood	1	2		Unconfirmed	0.48	Y	--	--	nest in moderate condition
4/13/2010	319	Red-tailed hawk	RTH	1179	deciduous	1			Active	0.16	Y	--	--	1 on nest
4/13/2010	320	Great horned owl	GHO	1180	deciduous	1		2	Active	0.85	N	--	--	not visible, on edge of buffer
4/14/2010	321	Red-tailed hawk	RTH	1182	deciduous	1			Active	0.26	Y	--	--	1 on nest
4/14/2010	326	Red-tailed hawk	RTH	1186	deciduous	1	2		Active	0.52	N	--	--	on nest, several residences nearby
4/14/2010	325	Red-tailed hawk	RTH	1188	deciduous	1			Unconfirmed	0.25	Y	--	--	nest in moderate condition
4/14/2010	327	Red-tailed hawk	RTH	1190	cottonwood	1			Active	0.86	Y	--	--	1 on nest
4/14/2010	328	Red-tailed hawk	RTH	1193	deciduous	1			Active	0.86	Y	--	--	1 on nest, very near house
4/14/2010	331	Great horned owl	GHO	1196	cottonwood	1	1		Active	0.88	Y	--	--	near nest
4/14/2010	332	Red-tailed hawk	RTH	1197	deciduous	1			Active	0.09	Y	--	--	1 on nest
4/14/2010	333	Red-tailed hawk	RTH	1198	deciduous	1			Active	0.97	Y	--	--	near nest
4/14/2010	334	Great horned owl	GHO	1199	deciduous	1		2	Active	0.54	N	--	--	chicks almost to fledge
4/14/2010	335	Accipiter	ACC	1202	deciduous	1	2		Unconfirmed	0.41	N	--	--	nest in moderate condition
4/14/2010	338	Red-tailed hawk	RTH	1200-1	deciduous	1			Unconfirmed	0.17	Y	--	--	1 on nest
4/14/2010	337	Red-tailed hawk	RTH	1203-4	deciduous	1			Active	0.08	Y	--	--	1 on nest
4/14/2010	339	Red-tailed hawk	RTH	1206	cottonwood	1			Unconfirmed	0.89	Y	--	--	1 on nest
4/14/2010	340	Accipiter	ACC	1207	deciduous	1			Unconfirmed	0.56	N	--	--	nest in poor condition
4/14/2010	341	Red-tailed hawk	RTH	1208-9	deciduous	2			Unconfirmed	0.49	Y	--	--	nest in good condition
4/14/2010	342	Red-tailed hawk	RTH	1210-11	deciduous	1	1		Active	0.10	Y	--	--	2 on nest
4/14/2010	343	Accipiter	ACC	1212	deciduous	1			Active	0.74	Y	--	--	1 on nest
4/14/2010	344	Great horned owl	GHO	1213-4	deciduous	1		2	Unconfirmed	0.64	Y	--	--	nest in moderate condition
4/14/2010	345	Red-tailed hawk	RTH	1216	cottonwood	1			Active	0.37	Y	--	--	mature chicks
4/14/2010	346	Red-tailed hawk	RTH	1217	cottonwood	1			Active	0.10	Y	--	--	1 on nest
4/14/2010	347	Red-tailed hawk	RTH	1219	deciduous	1			Inactive	0.12	Y	--	--	1 on nest
4/14/2010	348	Red-tailed hawk	RTH	1220	deciduous	1			Inactive	0.10	Y	--	--	2 nests in poor/moderate condition
4/14/2010	349	Red-tailed hawk	RTH	1222-3	cottonwood	1			Active	0.68	N	--	--	1 on nest
4/14/2010	350	Red-tailed hawk	RTH	1224-5	cottonwood	2	2		Active	0.47	Y	--	--	nest in moderate condition
4/14/2010	351	Great horned owl	GHO	1226-7	deciduous	1			Active	0.12	Y	--	--	2 on nest
4/14/2010	352	Red-tailed hawk	RTH	1228	cottonwood	1			Unconfirmed	0.93	Y	--	--	chicks almost to fledge
4/14/2010	353	Red-tailed hawk	RTH	1234-5	cottonwood	1			Active	0.06	Y	--	--	nest in good condition
4/14/2010	354	Red-tailed hawk	RTH	1236	cottonwood	1			Unconfirmed	0.41	Y	--	--	1 on nest, current construction
4/8/2010	050	Buteo	BU	762	deciduous				Unconfirmed	0.77	N	--	--	nest in good condition
4/8/2010	051	Golden eagle	GE	783	cottonwood				Unconfirmed	--	--	--	--	
4/8/2010	052	Golden eagle	GE	784	cottonwood				Unconfirmed	--	--	--	--	

* Distance from 3.26.10 centerline and PPA centerline based on post-survey measurements. Centerline visibility from nest based on field survey estimates and a review of topographic map information. NA is inserted when the nest was not associated with the centerline. The PPA centerline is based on the 9 route variations recommended in the DEIS by MDEQ, otherwise, the PPA line is the same as the 3.26.10 centerline.

** PPA mileposts were calculated based on joining the 9 DEIS MDEQ route variations with the 3.26.10 CL. Note, this mileposting is specific to this report and will not correspond with final mileposting once it is assigned.

WESTECH Environmental Services, Inc. 2010

Attachment 2. Raptor Nest Aerial Search Results, Keystone XL - Steele City April 2010: Facilities and Transmission Lines

Date	Way-point No.	Species	Species Code	Photo No.	Sub-strate	No. Adults Observed	No. Eggs Observed	No. Chicks Observed	Nest Status	Project Component	Distance from Component (<0.5 Mile or <1.0 Mile)	Comments
Off Right-of-Way Facilities (Contractor Yards, Pipe Yards, Contractor Camps)												
4/10/2010	130	Great horned owl	GHO	901	deciduous	1			Active	CC-02	<1.0	1 adult on nest
4/8/2010	43	Red-tailed hawk	RTH	775	cottonwood				Unconfirmed	CY-01	<1.0	
4/8/2010	44	Red-tailed hawk	RTH	776	cottonwood				Unconfirmed	CY-01	<1.0	
4/9/2010	81	Red-tailed hawk	RTH	841	cottonwood	1			Active	CY-03	<1.0	1 adult within 0.5 mile of nest
4/9/2010	101	Buteo	BU	863	cottonwood				Unconfirmed	CY-04	<1.0	
4/9/2010	111	Buteo	BU	874	deciduous				Unconfirmed	CY-08	<0.5	
4/9/2010	112	Ferruginous hawk	FH	875	cottonwood				Unconfirmed	CY-08	<1.0	nest in good condition
4/11/2010	218	Golden eagle	GE	1006-7	cottonwood	2			Active	PY-14	<0.5	huge nest
4/14/2010	322	Red-tailed hawk	RTH	1185	deciduous	1			Active	CY-15	<1.0	1 on nest; within 1 mi. of dump, substation, hwy
4/14/2010	323	Accipiter	ACC	1186	deciduous				Unconfirmed	CY-15	<1.0	within 1 mi. of dump, substation, hwy
4/14/2010	324	Great horned owl	GHO	1187	deciduous	1	2		Active	CY-15	<1.0	1 on nest; within 1 mi. of dump, substation, hwy
Transmission Lines												
4/8/2010	2	Buteo	BU	-	cottonwood				Unconfirmed	TL(PS-09)	<0.5	
4/8/2010	3	Buteo	BU	-	cottonwood				Unconfirmed	TL(PS-09)	<1.0	
4/8/2010	4	American Kestrel	AK	-	rock / cliff	2			Active	TL(PS-09)	<1.0	pair present
4/8/2010	5	Prairie falcon	PF	737	rock / cliff	2			Active	TL(PS-09)	<1.0	pair present
4/8/2010	6	Ferruginous hawk	FH	738	rock / cliff				Inactive	TL(PS-09)	<0.5	badly deteriorated
4/8/2010	9	Red-tailed hawk	RTH	-	cottonwood	1			Active	TL(PS-09)	<1.0	on Milk River
4/8/2010	10	Red-tailed hawk	RTH	-	cottonwood	1			Active	TL(PS-09)	<0.5	
4/8/2010	11	Ferruginous hawk	FH	741	deciduous	1			Active	TL(PS-09)	<0.5	1 female on nest
4/8/2010	13	Buteo	BU	-	cottonwood				Unconfirmed	TL(PS-09)	<1.0	
4/8/2010	14	Ferruginous hawk	FH	184	cottonwood	1			Active	TL(PS-09)	<1.0	1 on nest
4/8/2010	15	Ferruginous hawk	FH	744	rock / cliff	1			Active	TL(PS-09)	<0.5	1 in area; 2 nests
4/8/2010	16	Ferruginous hawk	FH	-	rock / cliff				Inactive	TL(PS-09)	<1.0	nest badly deteriorated
4/8/2010	35	Golden eagle	GE	766	cottonwood	1			Active	TL(PS-10)	<1.0	1 on nest
4/8/2010	36	Ferruginous hawk	FH	768	cottonwood	1	2		Active	TL(PS-10)	<0.5	1 on nest
4/8/2010	38	Great horned owl	GHO	770	deciduous	1			Active	TL(PS-10)	<1.0	1 on nest
4/8/2010	55	Bald eagle	BE	795	cottonwood	1			Active	TL(PS-10)	<1.0	1 nearby
4/9/2010	67	Ferruginous hawk	FH	826-7	rock / cliff				Unconfirmed	TL(PS-11)	<1.0	stick nest, possible cavity nest for PF also
4/9/2010	68	Red-tailed hawk	RTH	828	cottonwood	1			Unconfirmed	TL(PS-11)	<1.0	
4/9/2010	102	Red-tailed hawk	RTH	864	cottonwood	1			Active	TL(PS-13)	<1.0	second adult nearby
4/10/2010	135	Red-tailed hawk	RTH	906	cottonwood	1			Active	TL(PS-14)	<1.0	1 on nest
4/10/2010	176	Buteo	BU	-	deciduous				Unconfirmed	TL(PS-16)	<0.5	in shelterbelt
4/10/2010	178	Buteo	BU	948	deciduous				Unconfirmed	TL(PS-16)	<0.5	
4/10/2010	179	Golden eagle	GE	950	rock / cliff	1			Active	TL(PS-16)	<0.5	1 on nest
4/10/2010	180	Golden eagle	GE	953	rock / cliff				Inactive	TL(PS-16)	<1.0	inactive, rocks in nest
4/10/2010	181	Golden eagle	GE	954	rock / cliff				Unconfirmed	TL(PS-16)	<1.0	
4/10/2010	182	Golden eagle	GE	958	rock / cliff				Unconfirmed	TL(PS-16)	<0.5	
4/10/2010	183	Red-tailed hawk	RTH	959	deciduous	1			Active	TL(PS-16)	<1.0	1 on nest
4/10/2010	184	Buteo	BU	960	deciduous				Unconfirmed	TL(PS-16)	<1.0	
4/10/2010	185	Golden eagle	GE	961	cottonwood				Unconfirmed	TL(PS-16)	<0.5	N
4/10/2010	186	Ferruginous hawk	FH	962	clay bank				Inactive	TL(PS-15)	<1.0	nest badly deteriorated
4/11/2010	191	Ferruginous hawk	FH	974	clay bank				Inactive	TL(PS-15)	<1.0	Y
4/11/2010	192	Golden eagle	GE	978	clay bank	2	1		Active	TL(PS-15)	<0.5	Adults nearby
4/11/2010	199	Golden eagle	GE	985	cottonwood	1			Active	TL(PS-17)	<1.0	Y
4/11/2010	201	Great horned owl	GHO	987	cottonwood	1			Active	TL(PS-17)	<1.0	Y
4/11/2010	203	Ferruginous hawk	FH	989	deciduous	1			Active	TL(PS-17)	<1.0	Y
4/11/2010	204	Red-tailed hawk	RTH	990	cottonwood	1			Active	TL(PS-17)	<0.5	Y
4/11/2010	205	Great horned owl	GHO	991	cottonwood	1			Active	TL(PS-17)	<1.0	Y
4/11/2010	206	Buteo	BU	992	deciduous				Inactive	TL(PS-17)	<1.0	Y
4/11/2010	227	Red-tailed hawk	RTH	1021	deciduous	1			Active	TL(PS-18)	<1.0	active with 1 adult
4/11/2010	228	Red-tailed hawk	RTH	1022	cottonwood				Unconfirmed	TL(PS-18)	<1.0	nest in good condition
4/12/2010	229	Great horned owl	GHO	1031	cottonwood	1			Active	TL(PS-18)	<0.5	1 on nest
4/12/2010	242	Swainsons hawk	SWH	1042	deciduous	1			Active	TL(PS-19)	<0.5	1 adult on nest
4/12/2010	243	Great horned owl	GHO	1049	deciduous	1			Active	TL(PS-19)	<1.0	1 on nest
4/12/2010	244	Red-tailed hawk	RTH	1050	deciduous	2			Active	TL(PS-19)	<1.0	1 near nest, 1 nearby
4/12/2010	247	Golden eagle	GE	1054	deciduous	1			Active	TL(PS-19)	<0.5	1 on nest
4/12/2010	248	Great horned owl	GHO	1056	deciduous				Unconfirmed	TL(PS-19)	<0.5	nest in good condition
4/12/2010	249	Red-tailed hawk	RTH	1057	deciduous	2			Active	TL(PS-19)	<1.0	2 adults in area
4/12/2010	250	Golden eagle	GE	1058	cottonwood				Unconfirmed	TL(PS-19)	<1.0	large nest, moderate condition
4/12/2010	251	Red-tailed hawk	RTH	1064	deciduous	2	3		Active	TL(PS-19)	<1.0	2 adults
4/12/2010	263	Great horned owl	GHO	1080	deciduous	1			Active	TL(PS-20)	<1.0	1 on nest
4/12/2010	264	Red-tailed hawk	RTH	1081	cottonwood				Unconfirmed	TL(PS-20)	<0.5	nest in moderate condition
4/12/2010	265	Red-tailed hawk	RTH	1082	cottonwood	1			Active	TL(PS-20)	<0.5	1 on nest
4/12/2010	266	Great horned owl	GHO	1084	deciduous	1			Active	TL(PS-20)	<1.0	1 on nest
4/12/2010	267	Red-tailed hawk	RTH	1085	deciduous	2			Active	TL(PS-20)	<1.0	1 on nest, 1 nearby
4/12/2010	268	Red-tailed hawk	RTH	1086	deciduous	1	2		Active	TL(PS-20)	<1.0	1 on nest
4/12/2010	269	Great horned owl	GHO	1087	deciduous	1			Active	TL(PS-20)	<1.0	1 on nest
4/12/2010	270	Red-tailed hawk	RTH	-	deciduous				Unconfirmed	TL(PS-20)	<1.0	nest near house, no photo
4/13/2010	290	Red-tailed hawk	RTH	1116	cottonwood				Unconfirmed	TL(PS-22)	<0.5	nest in good condition
4/13/2010	300	Red-tailed hawk	RTH	1145	deciduous				Unconfirmed	TL(PS-23)	<1.0	nest in very good condition
4/13/2010	301	Red-tailed hawk	RTH	1147	deciduous	1			Active	TL(PS-23)	<0.5	1 on nest
4/13/2010	316	Red-tailed hawk	RTH	1175	cottonwood	1			Active	TL(PS-24)	<0.5	1 on nest
4/14/2010	329	Red-tailed hawk	RTH	1194	deciduous	2	2		Active	TL(PS-25)	<1.0	1 on nest
4/14/2010	330	Red-tailed hawk	RTH	1195	deciduous	2			Active	TL(PS-25)	<0.5	1 on nest
4/14/2010	351	Great horned owl	GHO	1226-7	deciduous	1		2	Active	TL(PS-26)	<1.0	chicks almost to fledge
4/14/2010	352	Red-tailed hawk	RTH	1228	cottonwood				Unconfirmed	TL(PS-26)	<0.5	nest in good condition
4/14/2010	353	Red-tailed hawk	RTH	1234-5	cottonwood	1			Active	TL(PS-26)	<1.0	1 on nest, Keystone current construction

